IN THE CLAIMS

Please amend claims 3-9, 12-13, 15-18 and 20-22, shown below in the set of all existing

25 claims, as follows. No additional fees are required because the Amendment still has 22 claims, as filed.

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1   1.   **(Previously Amended)** A method for pre-processing an access plan generated for

2   a query in a relational database management system to include a direct call mechanism replacing

3   a lookup function of a run-time interpreter, said access plan including a plurality of operation

4   codes, each of said operation codes being associated with one or more executable functions for

5   performing the query, said method comprising the steps of:

6   (a)   determining from the access plan an executable function associated with a first

7   operation code; and

8   (b)   augmenting said first operation code in the access plan with a pointer to said

9   executable function to provide a direct call mechanism replacing a lookup function of a run-time

10   interpreter.

1   2.   **(Original)** The method as claimed in claim 1, further comprising repeating steps (a) and

2   (b) for the remaining operation codes in the access plan.

1   3.   **(Currently Amended)** The method as claimed in claim 1, wherein said step (b)

2   comprises:

3   augmenting said first operation code in the access plan with a pointer to an intermediate

4   function, ~~said intermediate function including~~ having a data structure, and

5   ~~for~~ storing a pointer to said executable function in the data structure.

1   4.   **(Currently Amended)** The method as claimed in claim 3, wherein said data structure

2   ~~includes~~ comprises means for storing information associated with said executable function or

3   said first operation code.

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1 5.   (Currently Amended) The method as claimed in claim 1, wherein said step (b)

2 comprises augmenting said first operation code in the access plan with another ~~a second~~ pointer

3 to a data structure, said data structure providing means for storing information associated with

4 said first operation code or said executable function.

1 6.   (Currently Amended) The method as claimed in claim 1, ~~wherein said step (a)~~ further

2 comprising a step of assessing the executable function associated with the first operation code

3 and, if applicable, replacing the direct call to the executable function with a direct call to a

4 ~~second~~ another executable function.

1 7.   (Currently Amended) The method as claimed in claim 3, wherein said intermediate

2 function comprises ~~includes~~ processing operations for the first operation code or the executable

3 function associated with the first operation code.

1 8.   (Currently Amended) The method as claimed in claim 7, wherein said processing

2 operations in the intermediate function comprise ~~include~~ gathering statistics on the use of the

3 executable function associated with the first operation code.

1 9.   (Currently Amended) The method as claimed in claim 7, wherein said processing

2 operations in the intermediate function comprise ~~include~~ a pause for receiving user input before

3 or after the direct call to the executable function.

1 10.   (Previously Amended) A computer program product for use on a computer wherein

2 queries are entered by a user for retrieving data in a relational database management system

3 having a query optimizer for generating an access plan for executing the query, said query

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4 optimizer including a direct call mechanism replacing the lookup function of a run-time

5 interpreter, said computer program product comprising:

6 a recording medium;

7 means recorded on said recording medium for instructing said computer to perform the

8 steps of:

9 (a) determining an executable function associated with a first operation code in the

10 access plan, the first operation code being one of a plurality of operation codes; and

11 (b) augmenting said first operation code in the access plan with a pointer to said

12 executable function to provide a direct call mechanism replacing a lookup function of a run-time

13 interpreter.

1 11. **(Original)** The computer program product as claimed in claim 10, the means for

2 instructing said computer further comprising repeating steps (a) and (b) for the remaining

3 operation codes in the access plan.

1 12. **(Currently Amended)** The computer program product as claimed in claim 10, wherein

2 said step (b) comprises:

3 augmenting said first operation code in the access plan with a pointer to an intermediate

4 function, ~~said intermediate function including~~ having a data structure, and

5 ~~for~~ storing a pointer to said executable function in the data structure.

1 13. **(Currently Amended)** The computer program product as claimed in claim 12, wherein

2 said data structure comprises ~~includes~~ means for storing information associated with said

3 executable function or said first operation code.

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1 14. (Original) The computer program product as claimed in claim 10, wherein said step (b)

2 comprises augmenting said first operation code in the access plan with another pointer to a data

3 structure, said data structure providing means for storing information associated with said first

4 operation code or said executable function.

1 15. (Currently Amended) The computer program product as claimed in claim 10, ~~wherein~~

2 ~~said step (a)~~ further comprising a step of ~~includes~~ assessing the executable function associated

3 with the first operation code and, if applicable, replacing ~~a~~ the direct call to the executable

4 function with a direct call to another executable function.

1 16. (Currently Amended) The computer program product as claimed in claim 12, wherein

2 said intermediate function comprises ~~includes~~ processing operations for the first operation code

3 or the executable function associated with the first operation code.

1 17. (Currently Amended) The computer program product as claimed in claim 16, wherein

2 said processing operations in the intermediate function comprise ~~include~~ gathering statistics on

3 the use of the executable function associated with the first operation code.

1 18. (Currently Amended) The computer program product as claimed in claim 16 ~~12~~,

2 wherein said processing operations in the intermediate function comprise ~~include~~ a pause for

3 receiving user input before or after ~~a~~ the direct call to the executable function.

1 19. (Previously Amended) A relational database management system for use with a

2 computer system wherein queries are entered by a user for retrieving data from tables, the

3 relational database management system including a query optimizer for generating an access

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4   plan associated with the queries entered by the user, said query optimizer including a direct call

5   mechanism replacing a lookup function of a run-time interpreter, said relational database

6   management system comprising:

7   (a)   means for determining an executable function associated with each of a plurality

8   of operation codes in the access plan; and

9   (b)   means for augmenting said operation codes in the access plan with a pointer to

10   said executable function associated with each operation code to provide a direct call mechanism

11   replacing a lookup function of a run-time interpreter.

1   20.   (Currently Amended) The relational database management system as claimed in claim

2   19, wherein said means for augmenting said operation codes further comprises includes means

3   for replacing said operation codes in the access plan with a pointer to an intermediate function,

4   and wherein said intermediate function comprises including a data structure for storing a pointer

5   to said executable function.

1   21.   (Currently Amended) The relational database management system as claimed in claim

2   20, wherein said data structure comprises includes means for storing information associated with

3   said executable function or said operation codes.

1   22.   (Currently Amended) The relational database management system as claimed in claim

2   19, wherein said means for augmenting said operation codes further comprises includes means

3   for adding another pointer to a data structure, said data structure providing means for storing

4   information associated with said operation codes or said executable function.

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